### 13. EDMONDS-KINGSTON

The Edmonds-Kingston ferry route connects the northern portion of the Kitsap Peninsula, and the Olympic Peninsula via the Hood Canal Bridge, with northern King and southern Snohomish counties. This 4.5 nautical mile route takes approximately 30 minutes to traverse. In 1999, the Edmonds-Kingston route placed second to Seattle-Bainbridge in overall traffic, carrying approximately 2.3 million passengers plus 2.4 million vehicles and drivers for a total of 4.7 million persons, or an average of 12,765 per day. During May 1999, the month in which the survey was conducted, daily ridership averaged 12,830 persons.

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for all three survey periods, including ferry user demographic information, can be found in Appendix B.

#### 13.1 TRIP MAKING INFORMATION

#### 13.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

The focus of these results is primarily on the PM peak survey period, contrasting the peak results with the PM non-peak period for key items such as trip purpose and wait times.

## **Trip Purpose**

The trip purpose and frequency for the weekday PM peak and non-peak periods for the Edmonds-Kingston route are summarized in Table 13-1 and Table 13-2, respectively. It is evident that the majority of riders are utilizing the ferry route for work/school or business related purposes in both the PM peak and PM non-peak periods.

Similar trends regarding the frequency of riders and the trip purposes could be observed for both the peak and non-peak periods. Specifically, for frequent riders of the Edmonds-Kingston route (10 or more rides in the past 7 days) the majority of trips were work/school commute or business related. Appointments/personal business/other trips as well as social/recreational/shopping/sight-seeing trips were made most often by somewhat infrequent ferry riders (2 to 5 rides in the past 7 days). Overall, work/school/ business

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school/business
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for 67% of trip
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up from just under

travel accounted for 67% of PM peak period trip purposes in 1999, up from just under 60% in 1993.

Table 13-1
Trip Purpose and Frequency of Use Distribution
Edmonds-Kingston — Weekday PM Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	7.5%	15.4%	20.0%	11.1%	367
2 to 5 Rides in Past 7 Days	19.3%	55.5%	60.9%	32.5%	1,079
6 to 9 Rides in Past 7 Days	14.5%	11.7%	8.4%	12.8%	426
10 or More Rides in Past 7 Days	50.5%	6.4%	0.0%	34.4%	1,139
No Answer	8.3%	11.0%	10.7%	9.1%	303
Totals	100.0%	100.0%	100.0%	100.0%	3,314
Overall Trip Purpose Distribution	66.5%	12.2%	21.2%	100.0%	
Expanded Ridership	2,205	405	704	3,314	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 13-2
Trip Purpose and Frequency of Use Distribution
Edmonds-Kingston — Weekday PM Non-Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	15.0%	17.8%	29.4%	19.8%	428
2 to 5 Rides in Past 7 Days	32.5%	50.2%	47.5%	40.8%	882
6 to 9 Rides in Past 7 Days	11.0%	9.0%	1.8%	7.9%	170
10 or More Rides in Past 7 Days	31.8%	3.5%	0.0%	16.3%	351
No Answer	9.8%	19.5%	21.3%	15.3%	330
Totals	100.0%	100.0%	100.0%	100.0%	2,161
Overall Trip Purpose Distribution	48.7%	22.5%	28.8%	100.0%	
Expanded Ridership	1,053	485	623	2,161	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 13-3 below describes trip origin and destination types per direction in the weekday PM peak period for the Edmonds-Kingston ferry route. Overall most peak period trips were made in the westbound direction, with 64% of the westbound trips made from work/school to home. In the eastbound direction, the largest percentage of trips were also work/school to home trips at 32%, they are closely followed by trips from some other place to home at 27%. The "other to home" percentage probably respresents those persons who

have stopped at a retail establishment, pick-up a child, or to run some other errand, all of which are part of typical trip-chaining activity.

Table 13-3
Trip Origin and Destination Types by Direction
Edmonds-Kingston — Weekday PM Peak Period

Origin & Destina	ntion Types	Destination	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	1.7%	1.4%	1.5%	50
	Work/School	3.8%	0.1%	1.5%	50
	Other	15.7%	4.2%	8.5%	283
Work/School	Home	31.8%	63.9%	51.9%	1,719
	Work/School	3.4%	1.7%	2.4%	78
	Other	4.5%	3.5%	3.9%	128
Other	Home	26.8%	21.4%	23.4%	775
	Work/School	1.9%	0.3%	0.9%	29
	Other	10.4%	3.5%	6.1%	202
Totals Travel Directio	n Diotribution	100.0% 37.5%	100.0% 62.5%	100.0% 100.0%	3,314
Expanded Ride		1,242	2,072	3,314	

# **Travel Modes and Round-Trip Patterns**

The round-trip patterns and methods for the PM peak period are summarized in Table 13-4. During the weekday PM peak period, approximately 78% of the respondents were on the second half of their trip. Of those persons on the second half of a round-trip, 79% reported they were completing their trip on the same day, and 68% reported using the same ferry. For those who were on the first portion of their trip when the survey was distributed, the respondents were asked to predict what travel pattern and method would be followed for the second portion. In contrast, those reporting on their expected return trip, only 55% reported they would return on the same day, with 35% reporting they would return on a different day, compared to 8% of second half respondents.

Table 13-4
Round-Trip Patterns and Methods
Edmonds-Kingston — Weekday PM Peak Period

Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Expanded Ridership
Declared Initial Trip				77.5%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	68.3%	5.7%	10.5%	2172
Not Using Ferry System	1.4%	1.3%	0.7%	88
Different Ferry Route	6.6%	1.2%	0.7%	219
No Answer	2.4%	0.1%	0.9%	90
Total Declared Initial Trip	78.8%	8.3%	12.9%	2569
Expected Return Trip				19.2%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	46.6%	27.1%	7.8%	519
Not Using Ferry System	1.9%	3.4%	0.6%	37
Different Ferry Route	2.1%	3.2%	0.6%	38
No Answer	4.0%	1.5%	1.2%	43
Total Expected Return Trip	54.7%	35.2%	10.1%	637
No Answer				3.3%
(Did Not Report Round-Trip Status)				
No Answer			100.0%	108
Expanded Ridership Total	2,373	438	503	3,314

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of these procedures. These modified percentages can nonetheless be used for generalized comparisons, as presented in the following discussion.

The access and egress mode to the ferry along with the boarding method for the Edmonds-Kingston route is described in Table 13-5 for the weekday PM peak period. In-vehicle boardings are the most common boarding method used during the PM peak hour, accounting for nearly 81% of all ridership during the PM peak period. The distribution of boarding methods in 1999 and 1993 data was similar in that more than three-quarters of all PM peak riders board in a vehicle.

"Walk-on riders using bus or shuttle modes to access and egress the ferry terminals have more than doubled since the 1993 survey." The percentage of walk-on riders using bus or shuttle modes to access and egress the ferry terminals has more than doubled since the 1993 survey. Increased transit service from both Kitsap and Community Transit are a likely result of the higher utilization of bus services observed in the 1999 survey data. Specifically, approximately 3% of the walk-on PM peak period passengers accessed the ferry terminal using the bus in 1993, compared to approximately 13% in 1999. A similar

pattern was observed with a shift in the egress mode. In 1993 approximately 3% of the passengers used a bus or shuttle to depart from the ferry terminal and in 1999 approximately 8% of the passengers utilized a bus or shuttle.

Vehicle access and egress to the terminals by walk-ons has also increased, resulting in a decline in pedestrian and bicycle access/egress. However, some of this shift may be attributable to differences in the way the access/egress mode questions were phrased and interpreted between the two surveys.

Table 13-5
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry
Edmonds-Kingston — Weekday PM Peak Period

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	14.7%	Walked-On		19.2%	Pedestrian/Bicycle	14.4%
By Vehicle*	72.0%	Pedestrian	100.0%		By Vehicle*	78.1%
By Bus or Shuttle	13.3%	Pedestrian w/ Bicycle	0.0%		By Bus or Shuttle	7.5%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	100.0%	In-Vehicle		80.8%	In-Vehicle	100.0%
		Vehicle Drivers*	68.1%			
		Vehicle Passengers	31.9%			
		Total	100.0%			
		Total		100.0%		
		Expanded Ridership Total		3,314		

<sup>\*</sup> includes motorcycles

Table 13-6 and Table 13-7 (below) summarizes the waiting time distribution by boarding method for a weekday PM peak period and non-peak period, respectively. Similar trends were noted for both PM peak period and non-peak periods. Specifically, most pedestrian and bicycle passengers waited zero to ten minutes to board the ferry (69% and 72% respectively) and most vehicle-boarding passengers waited eleven to thirty minutes (55% and 44% respectively). However, the overwhelming majority (greater than 80%) of all riders, regardless of boarding method, waited less than 30 minutes.

Table 13-6
Wait Time Distribution by Boarding Method
Edmonds-Kingston — Weekday PM Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	68.7%	28.5%	1,201
11 to 30 Minutes	17.2%	55.0%	1,581
31 to 60 Minutes	1.3%	10.0%	276
61 to 90 Minutes	0.7%	0.5%	18
More Than 90 Minutes	0.0%	0.0%	0
No Answer	12.1%	6.0%	238
Totals	100.0%	100.0%	
Expanded Ridership	637	2,677	3,314

Table 13-7
Wait Time Distribution by Boarding Method
Edmonds-Kingston — Weekday PM Non-Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	71.7%	38.4%	930
11 to 30 Minutes	18.8%	44.4%	883
31 to 60 Minutes	3.8%	10.0%	198
61 to 90 Minutes	0.0%	0.3%	6
More Than 90 Minutes	0.0%	0.0%	0
No Answer	5.7%	6.9%	145
Totals	100.0%	100.0%	
Expanded Ridership	303	1,859	2,161

Parking statistics for the ferry passengers can be found in Table 13-8 for the weekday PM peak period. The average cost of parking ranged from \$0.00 to \$5.32, where most passengers who used their vehicle paid approximately \$2.34 to park. From Table 13-8, it can be inferred that approximately 32% of riders may have had a car on both sides of the

water, with 17.5% paying for parking on each side. About 25% of PM peak period riders did not park a vehicle on either side.

Table 13-8
Walk-Board Passenger Parking Statistics
Edmonds-Kingston — Weekday PM Peak Period

Reported Parking Characteristics	Expanded Ridership	Percent of Total	Average Total Parking Paid*
Used Paid Parking on Both Sides	111	17.5%	\$5.32
Used Paid Parking One Side & Free Parking Other Side	66	10.4%	\$2.32
Used Free Parking on Both Sides	28	4.3%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	172	27.1%	\$2.34
Free Parking One Side & Did Not Park Other Side or Insufficient Information	91	14.4%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	168	26.4%	NA
Totals	637	100.0%	

<sup>\*</sup>Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

### **Desired Transit Improvements**

Table 13-9 and Table 13-10 describe the desired transit improvements that were expressed by the respondents for the PM peak period and non-peak period, respectively. Both tables show that the most common improvement requested would be to have service within two blocks of their origin or destination. The second most frequent request was to provide transit service at both ends of the ferry route. Additionally, the most frequent write-in comment for the PM peak period was for free or lower park & ride fees.

Table 13-9
Transit Improvements Desired
Edmonds-Kingston — Weekday PM Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	23.4%	777
Service at Both Ends of Ferry Route	17.3%	572
Seamless Connection between Ferry & Bus	4.7%	156
Employer Paid or Subsidized Bus Pass	5.2%	172
More Park & Ride Lots/Spaces Available	15.2%	504
None of the Above/No Answer	26.3%	870
Frequent Write-In Comments		
More Passenger Only Service	0.9%	31
Lower Park & Ride Parking Fees/Free	4.1%	135
More Park & Ride Information	2.4%	80
"Other" Comments	0.5%	18
Totals	100.0%	3,314

Table 13-10
Transit Improvements Desired
Edmonds-Kingston — Weekday PM Non-Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	21.1%	456
Service at Both Ends of Ferry Route	16.4%	354
Seamless Connection between Ferry & Bus	3.2%	69
Employer Paid or Subsidized Bus Pass	2.8%	61
More Park & Ride Lots/Spaces Available	14.4%	311
None of the Above/No Answer	33.8%	730
Frequent Write-In Comments		
More Passenger Only Service	0.5%	11
Lower Park & Ride Parking Fees/Free	3.9%	83
More Park & Ride Information	3.6%	77
"Other" Comments	0.4%	9
Totals	100.0%	2,161

#### 13.1.2 Sunday Trip Statistics

Sunday trip statistics presented here are grouped into two categories:

- Trip purpose and usage frequency; and
- Travel modes and round-trip patterns.

#### **Trip Purpose**

For the Sunday survey period, the trip purpose and frequency can be observed in Table 13-11. From the table it is evident that nearly 75% of Sunday trips involve social/recreational/ shopping sightseeing purposes. Compared to the PM peak period, Sunday survey period passengers are much less frequent riders. The large majority of Sunday riders reported 5 or fewer rides in the past week, with 22% recording their first ride in the past 7 days.

Table 13-11
Trip Purpose and Frequency of Use Distribution
Edmonds-Kingston — Sunday Survey Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Usable Responses
1st Ride in Past 7 Days*	17.5%	19.5%	23.6%	22.4%	163
2 to 5 Rides in Past 7 Days	44.4%	51.1%	59.3%	56.5%	412
6 to 9 Rides in Past 7 Days	9.5%	10.5%	3.2%	5.1%	37
10 or More Rides in Past 7 Days	22.2%	8.3%	2.1%	4.9%	36
No Answer	6.3%	10.5%	11.8%	11.1%	81
Totals	100.0%	100.0%	100.0%	100.0%	729
Overall Trip Purpose Distribution	8.6%	18.2%	73.1%	100.0%	
Usable Responses	63	133	533	729	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

### **Travel Modes and Round-Trip Patterns**

The responses for the round-trip patterns and methods for the Sunday survey period are summarized in Table 13-12. During the Sunday survey period, approximately 61% of the respondents were on the second half of their trip. A major difference between the weekday survey period ridership and the Sunday survey period was the percentage of riders who began their trip on a different day. Specifically, during the weekday PM peak period only

8% of the declared initial trips occurred on some other day. In the Sunday survey period, 50% of the total declared initial trips occurred on some other day.

Table 13-13 summarizes the waiting time distribution by boarding method for the Sunday survey period. Approximately 75% of Sunday survey period pedestrian and bicycle passengers waited zero to ten minutes to board the ferry. Nearly half of in-vehicle passengers during the Sunday survey period reported waiting 11 to 30 minutes, with over 25% waiting 10 minutes or less. Comparing to the weekday period, a similar pattern was observed where most pedestrians and bicyclists waited from zero to ten minutes, and vehicle boarders waited approximately eleven to thirty minutes.

Table 13-12 Round-Trip Patterns and Methods Edmonds-Kingston — Sunday Survey Period

Zumonus rumgston	Sulla	sunday survey remou			
Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Usable Responses	
Declared Initial Trip				66.7%	
(Reported on 2nd Half of Round-Trip)					
Same Ferry Route	30.5%	41.4%	10.5%	400	
Not Using Ferry System	3.3%	2.1%	0.6%	29	
Different Ferry Route	3.5%	5.3%	0.2%	44	
No Answer	0.4%	1.4%	0.8%	13	
Total Declared Initial Trip	37.7%	50.2%	12.1%	486	
Expected Return Trip				31.6%	
(Reported on 1st Half of Round-Trip)					
Same Ferry Route	65.2%	10.0%	8.3%	192	
Not Using Ferry System	1.7%	3.0%	0.9%	13	
Different Ferry Route	3.9%	3.0%	0.4%	17	
No Answer	2.6%	0.4%	0.4%	8	
Total Expected Return Trip	73.5%	16.5%	10.0%	230	
No Answer				1.8%	
(Did Not Report Round-Trip Status)					
No Answer			100.0%	13	
Usable Responses	352	282	95	729	

Table 13-13
Wait Time Distribution by Boarding Method
Edmonds-Kingston — Sunday Survey Period

Wait Time Distribution / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Usable Responses
Zero to 10 Minutes	73.8%	28.0%	234
11 to 30 Minutes	7.7%	49.4%	333
31 to 60 Minutes	6.2%	14.5%	100
61 to 90 Minutes	0.0%	0.8%	5
More Than 90 Minutes	0.0%	0.3%	2
No Answer	12.3%	7.1%	55
Totals	100.0%	100.0%	
Usable Responses	65	664	729

#### 13.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the PM peak period origin-destination (O-D) trip tables by travel direction, presented as expanded PM peak ridership volumes and distributions for all modes, as well as for walk-on and in-vehicle boardings. Similar O-D trip tables presenting unexpanded Sunday survey period distributions are also provided. Complementing the PM peak and Sunday trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

# 13.2.1 Weekday PM Peak Period Trip Patterns

Table 13-14 summarizes the weekday PM peak period in the westbound direction for all boarding modes for the Edmonds-Kingston ferry route. Additionally, Figure 13-1 depicts westbound origin and destination information by boarding mode. A significant percentage of PM peak passengers originated from the greater Everett area and were destined to the surrounding areas of North Kitsap County. Table 13-15 and Figure 13-2 show trip patterns for the weekday PM peak period in the eastbound direction for all modes. Many riders traveling eastbound during the PM peak period originated from either northern part of the Kitsap Peninsula or the greater Bremerton area. It is likely that most of latter trips from the Bremerton area reflect Navy personnel working on the USS Abraham and commuting between the Everett Naval Station and the Puget Sound Naval Shipyards in Bremerton. Everett and Edmonds proved to be the most frequent eastbound destinations.

The PM peak period westbound walk-on and invehicle boardings are shown in Table 13-16 and Table 13-17, respectively. Many of the westbound walk-on boardings originated from either the Edmonds or Lynnwood districts and were destined to either Kingston or the general vicinity of the North Kitsap County district. In-vehicle boardings in the westbound direction had high percentage of passengers originating from the greater Everett area and going to the general vicinity of North Kitsap County. Figure 13-3 illustrates the PM peak period trip origins and destinations by boarding modes.

"Trips from the Bremerton area reflect Navy personnel working on the USS Abraham and commuting between the Everett Naval Station and the Puget Sound Naval Shipyards in Bremerton."

In the eastbound direction, the PM peak walk-on and in-vehicle passengers can be observed in Table 13-18 and Table 13-19, respectively. A number of the walk-on boarding passengers started their trip from Kingston and were headed to Edmonds. Additionally, many of the in-vehicle boarding passengers began their trip from the greater Bremerton area and were destined for the greater Everett area, again reflecting the naval work being done on the USS Abraham at the Puget Sound Naval Shipyards. Figure 13-4 graphically represents the eastbound PM peak period trip origins and destinations by boarding mode.

Table 13-14
Edmonds-Kingston O-D Trip Table
Weekday PM Peak Period — Westbound — All Boarding Modes

ORIGIN	DESTINATION	당 South Kitsap/Mest Pierce Counties	wingston 1320	Poulsbo	SSS Bainbridge Island	SS Other North Kitsap County	Greater Bremerton	で で で び Other Central Kitsap County	Mason County	1327 Port Townsend	8 Other Northeast Jefferson County	Southeast Jefferson County	Dort Angeles	123 Sequim/Other East Clallam County	단 당 West Olympic Pensinsula	Origin Totals	Origin Shares
Edmonds	1301	13	59	5	5	43	3	9	2		13					154	7.5%
Lynnwood	1302	10	46	8		77	15	39	4	5	9	6				221	10.7%
Mountlake Terrace	1303	6	9	6	20	46	2	40	6		10	2		3	3	154	7.5%
Mukilteo/Paine Field	1304	4	39	16	9	63	11	41			7			3		193	9.4%
Greater Everett	1305	24	18	4	5	55	20	47	3		10			15		201	9.7%
Other West Snohomish County	1306	3	20	6	2	9	6	12			7			3		70	3.4%
West Whatcom/West Skagit/Island Counties	1307	7	2			3	7	10			7			3	4	43	2.1%
Seattle CBD	1308		42			26		6		6	17	3	3	6	3	113	5.5%
Greater South Seattle	1309	3	14			7							3			27	1.3%
Capitol Hill/Queen Anne/Magnolia	1310		40	3		42				10	9			18	7	129	6.2%
Ballard-Green Lake/University District	1311		46	6		72		4		6	33	2	3	11	10	193	9.4%
North Seattle/Sand Point	1312		22		3	19	3	22		3	6			3		81	3.9%
Shoreline-Lake Forest Park	1313	3	17		3	28	7	11			10				10	90	4.4%
Bothell-Kirkland	1314		22			25	6	15		3	9			9	3	93	4.5%
Greater Bellevue/Redmond/Issaquah	1315		30	10	3	48	3	15		6	12			17	3	147	7.1%
Southwest King County	1316		14	3	2	24				3	6	3	3		13	71	3.5%
Other West King County	1317					2			7							9	0.4%
All Other Places	1333		2	2	4	3		10			20			6	23	71	3.5%
Destination Totals		74	441	70	58	592	84	282	22	43	188	17	12	98	80	2,063	100.0%
Destination Shares		3.6%	21.4%	3.4%	2.8%	28.7%	4.1%	13.7%	1.1%	2.1%	9.1%	0.8%	0.6%	4.8%	3.9%	100.0%	

Figure 13-1
Edmonds - Kingston Westbound PM Peak Trips
All Boarding Modes

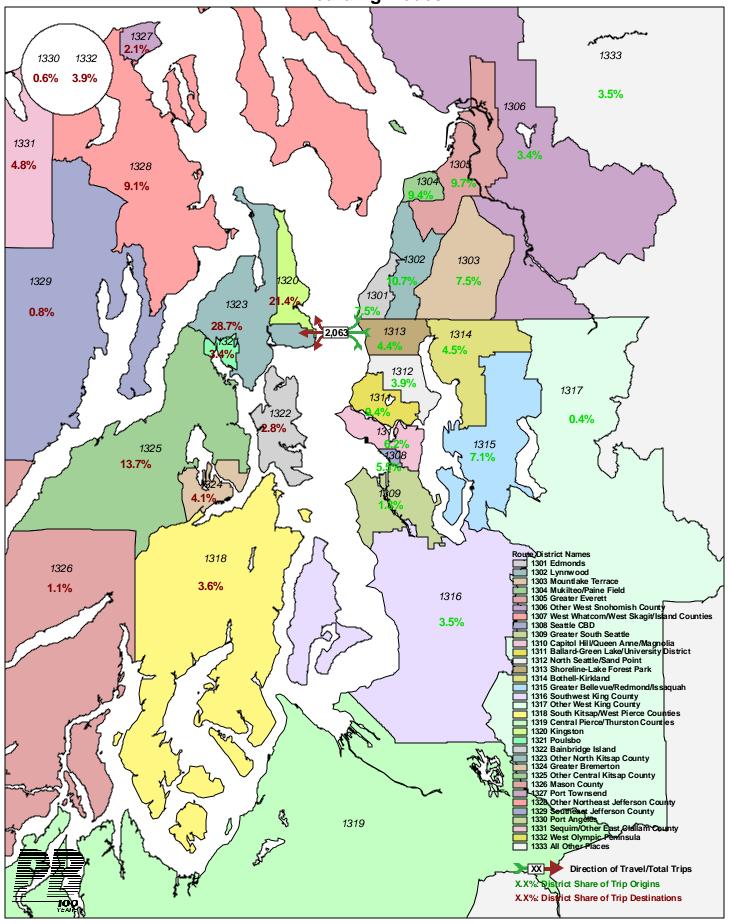


Table 13-15
Edmonds-Kingston O-D Trip Table
Weekday PM Peak Period — Eastbound — All Boarding Modes

ORIGIN	DESTINATION	Squonds	роомиий 7	SS Mountake Terrace	1304 Mukiteo/Paine Field	Greater Everett	930 Other West Snohomish County	West WhatcomWest Skagilisland Counties	Seatte CBD	6 Greater South Seattle	D Capitol Hill/Queen Anne/Magnolia	12 Ballard-Green Lake/University District	1312 North Seattle/Sand Point	13 Shoreline-Lake Forest Park	Bothell-Kirkland	Greater Bellevue/Redmond/Issaquah	9 Southwest King County	Other West King County	55 Central Pierce/Thurston Counties	EE All Other Places	Origin Totals	Origin Shares
South Kitsap/West Pierce Counties	1318	11	12					4	5					4							35	2.9%
Kingston	1320	22	8	8			5	5	4	5		13	4	7						4	84	6.9%
Poulsbo	1321	4	16	4			7					4		4	4						41	3.4%
Bainbridge Island	1322	18	11			4	5	4				14	7	7	12						81	6.7%
Other North Kitsap County	1323	18	7	43	4	7			14		21	7	11	28	4	12	5	5	4	14	203	16.7%
Greater Bremerton	1324	12	14	14		99	41	22			4		4	11	7					4	231	19.0%
Other Central Kitsap County	1325	49	17	12		32		4					7	7	19	5				5	157	13.0%
Mason County	1326	5	7			5									12						30	2.4%
Port Townsend	1327	4				4					4	4					4				18	1.5%
Other Northeast Jefferson County	1328		14	4	4	4					28	18	7		7	4	12	4		4	109	9.0%
Southeast Jefferson County	1329		5	4	4	4		4				7	5	4	4						39	3.2%
Port Angeles	1330	7	11			4		9			4	5	4		4					7	53	4.4%
Sequim/Other East Clallam County	1331	9		5	4	7	9				4	4	7	16	11	7	10			9	101	8.3%
West Olympic Pensinsula	1332	4		4			4				5	5			4					4	28	2.3%
All Other Places	1333										4										4	0.3%
Destination Totals		162	123	97	14	168	70	50	22	5	72	80	56	87	87	28	31	9	4	49	1,214	100.0%
Destination Shares		13.4%	10.2%	8.0%	1.2%	13.8%	5.7%	4.1%	1.8%	0.4%	5.9%	6.6%	4.6%	7.2%	7.2%	2.3%	2.6%	0.7%	0.3%	4.1%	100.0%	

Figure 13-2
Edmonds - Kingston Eastbound PM Peak Trips
All Boarding Modes

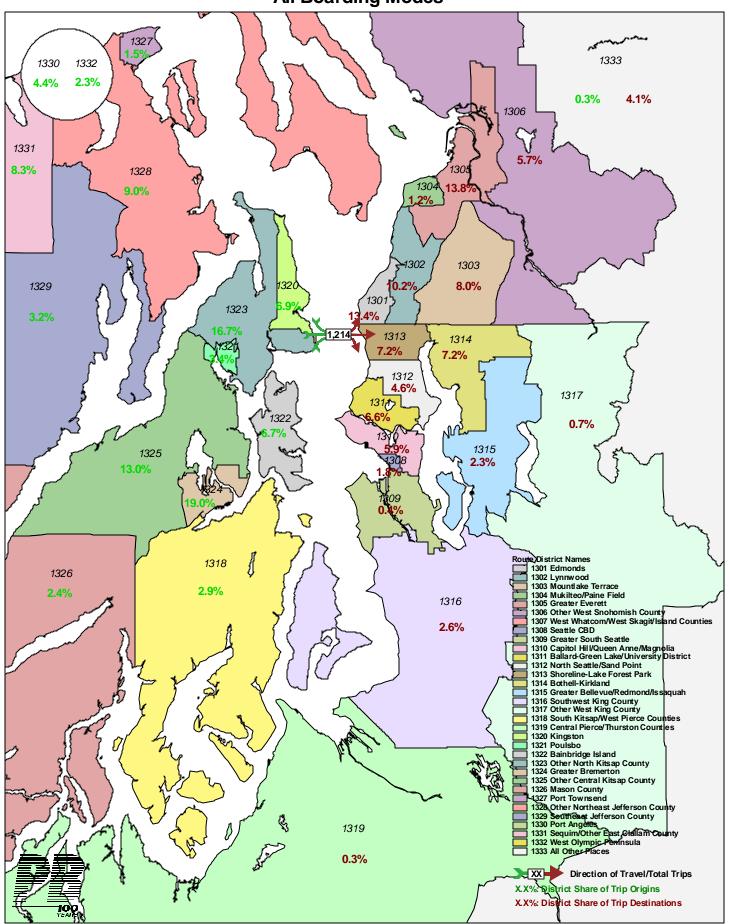


Table 13-16 Edmonds-Kingston O-D Trip Table Weekday PM Peak Period — Westbound — Walk-On Boardings

DESTINATION	다. South Kitsap/West Pierce Counties	Vugston Krigston 1320	ogsinod 1321	Bainbridge Island	52 Other North Kitsap County	Greater Bremerton	52 Other Central Kitsap County	Mason County	Port Townsend	82 Other Northeast Jefferson County	ಟ Southeast Jefferson County	Origin Totals	Origin Shares
1301	6	32	2	2	34		6	2				85	17.3%
1302		23	2		38	2	6		2	6		81	16.5%
1303		6	2		6	2	2				2	21	4.3%
1304		13			13		2					28	5.6%
1305		11		2	15		2					30	6.1%
1306		11		2								13	2.6%
1307		2										2	0.4%
1308		23			9							32	6.5%
1309		11										11	2.2%
1310		15			13							28	5.6%
1311		13			19					2	2	36	7.4%
1312		6			15		2					23	4.8%
1313		11			9		2			4		26	5.2%
1314		11			15		2					28	5.6%
1315		9			13		2					23	4.8%
1316		11		2	6							19	3.9%
1317					2							2	0.4%
1333		2	2									4	0.9%
	6	208	9	9	206	4	28	2	2	13	4	491	100.0%
	1.3%	42.4%	1.7%	1.7%	42.0%	0.9%	5.6%	0.4%	0.4%	2.6%	0.9%	100.0%	
	1301 1302 1303 1304 1305 1306 1307 1308 1310 1311 1312 1313 1314 1315 1316 1317	1318  1301 6  1302  1303  1304  1305  1306  1307  1308  1309  1310  1311  1312  1313  1314  1315  1316  1317  1333  6	1318         1320           1301         6         32           1302         23           1303         6           1304         13           1305         11           1306         11           1307         2           1308         23           1309         11           1311         13           1312         6           1313         11           1314         11           1315         9           1316         11           1317         1333         2           6         208	1318         1320         1321           1301         6         32         2           1302         23         2           1303         6         2           1304         13         1           1305         11         1           1306         11         1           1307         2         1           1308         23         1           1310         15         1           1311         13         13           1312         6         1313           1314         11         1           1315         9         1           1316         11         1           1317         1         2           2         6         208         9	1318     1320     1321     1322       1301     6     32     2     2       1302     23     2     2       1303     6     2     2       1304     13     1     2       1305     11     2     2       1306     11     2     2       1307     2     2     3       1309     11     13     13       1311     13     13     13       1312     6     13     11     13       1313     11     13     11     13       1314     11     2     13     14     11       1315     9     13     11     2       1317     2     2     2       6     208     9     9     9	1318         1320         1321         1322         1323           1301         6         32         2         2         34           1302         23         2         38         38           1303         6         2         6         6           1304         13         13         13           1305         11         2         15           1306         11         2         5           1307         2         2         9           1308         23         9         9           1309         11         13         19           1311         13         19         13           1311         13         19         15           1313         11         9         13           1314         11         15         13           1315         9         13         13           1316         11         2         6           1317         2         6           1333         2         2           6         208         9         9         206	1318         1320         1321         1322         1323         1324           1301         6         32         2         2         34           1302         23         2         38         2           1303         6         2         6         2           1304         13         13         13           1305         11         2         15           1306         11         2         5           1307         2         2         4           1308         23         9         9           1309         11         13         19           1311         13         19         13           1312         6         15         15           1313         11         9         13           1314         11         15         13           1315         9         13         13           1316         11         2         6           1317         2         2           1333         2         2           6         208         9         9         206         4	1318         1320         1321         1322         1323         1324         1325           1301         6         32         2         2         34         6           1302         23         2         38         2         6           1303         6         2         6         2         2           1304         13         13         2         13         2           1305         11         2         15         2         2           1306         11         2         5         2         2           1307         2         2         3         9         3         3         9         3         3         9         3         3         3         9         3         3         3         3         3         3         3         3         3         3         3         3         3         4         3         3         3         3         4         3         3         4         3         3         3         4         3         3         3         4         3         3         4         3         3         3         3         3	1318         1320         1321         1322         1323         1324         1325         1326           1301         6         32         2         2         34         6         2           1302         23         2         38         2         6         2           1303         6         2         6         2         2           1304         13         13         2         13           1305         11         2         15         2           1306         11         2         5         2           1307         2         2         3         9           1308         23         9         3         3           1309         11         3         19         3           1311         13         19         3         2           1312         6         15         2         3           1313         11         9         2         3           1314         11         15         2         3           1316         11         2         6         3         2           1316         11	1318         1320         1321         1322         1323         1324         1325         1326         1327           1301         6         32         2         2         34         6         2           1302         23         2         38         2         6         2           1303         6         2         6         2         2           1304         13         13         2         1           1305         11         2         15         2           1306         11         2         5         2           1307         2         2         4         4           1308         23         9         9         4           1310         15         13         13         13           1311         13         19         2           1313         11         9         2           1313         11         9         2           1314         11         15         2           1315         9         13         2           1316         11         2         6           1317         2	1318         1320         1321         1322         1323         1324         1325         1326         1327         1328           1301         6         32         2         2         34         6         2         2         4         3	1318       1320       1321       1322       1323       1324       1325       1326       1327       1328       1329         1301       6       32       2       2       34       6       2       6       2       6       2       1328       1329         1302       23       2       38       2       6       2       6       2       6       2       2       2       2       2       1303       2       1304       13       13       2       1313       1	1318         1320         1321         1322         1323         1324         1325         1326         1327         1328         1329           1301         6         32         2         2         34         6         2         85           1302         23         2         38         2         6         2         6         81           1303         6         2         6         2         3         3         3         3         3         3         3         3         3         3         3         3         3         2         2         3         3         3         2         2         3         3         3        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Table 13-17
Edmonds-Kingston O-D Trip Table
Weekday PM Peak Period — Westbound — In-Vehicle Boardings

ORIGIN	DESTINATION	당 장 South Kitsap'West Pierce Counties	Kingston 1320	ogspo 1321	S251 Bainbridge Island	523 Other North Kitsap County	Greater Bremerton	525 Other Central Kitsap County	Mason County	1327 Port Townsend	SS Other Northeast Jefferson County	Southeast Jefferson County	Dort Angeles	153 Teguim/Other East Clallam County	1335 West Olympic Pensinsula	Origin Totals	Origin Shares
Edmonds	1301	7	27	3	3	9	3	3			13					69	4.4%
Lynnwood	1302	10	23	6		39	13	33	4	3	3	6				140	8.9%
Mountlake Terrace	1303	6	3	4	20	40		37	6		10			3	3	133	8.5%
Mukilteo/Paine Field	1304	4	26	16	9	51	11	39			7			3		166	10.5%
Greater Everett	1305	24	7	4	3	40	20	45	3		10			15		171	10.9%
Other West Snohomish County	1306	3	9	6		9	6	12			7			3		57	3.6%
West Whatcom/West Skagit/Island Counties	1307	7				3	7	10			7			3	4	41	2.6%
Seattle CBD	1308		19			17		6		6	17	3	3	6	3	81	5.2%
Greater South Seattle	1309	3	3			7							3			16	1.0%
Capitol Hill/Queen Anne/Magnolia	1310		25	3		29				10	9			18	7	101	6.4%
Ballard-Green Lake/University District	1311		33	6		53		4		6	30		3	11	10	157	10.0%
North Seattle/Sand Point	1312		16		3	4	3	19		3	6			3		58	3.7%
Shoreline-Lake Forest Park	1313	3	6		3	19	7	9			6				10	65	4.1%
Bothell-Kirkland	1314		11			10	6	13		3	9			9	3	65	4.2%
Greater Bellevue/Redmond/Issaquah	1315		21	10	3	35	3	12		6	12			17	3	124	7.9%
Southwest King County	1316		3	3		17				3	6	3	3		13	52	3.3%
Other West King County	1317								7							7	0.4%
All Other Places	1333				4	3		10			20			6	23	67	4.3%
Destination Totals		68	233	62	49	386	80	255	20	41	175	12	12	98	80	1,572	100.0%
Destination Shares		4.3%	14.8%	3.9%	3.1%	24.5%	5.1%	16.2%	1.3%	2.6%	11.2%	0.8%	0.8%	6.2%	5.1%	100.0%	$\overline{}$

Figure 13-3
Edmonds - Kingston Westbound PM Peak Period
Trip Origins & Destinations by Boarding Mode

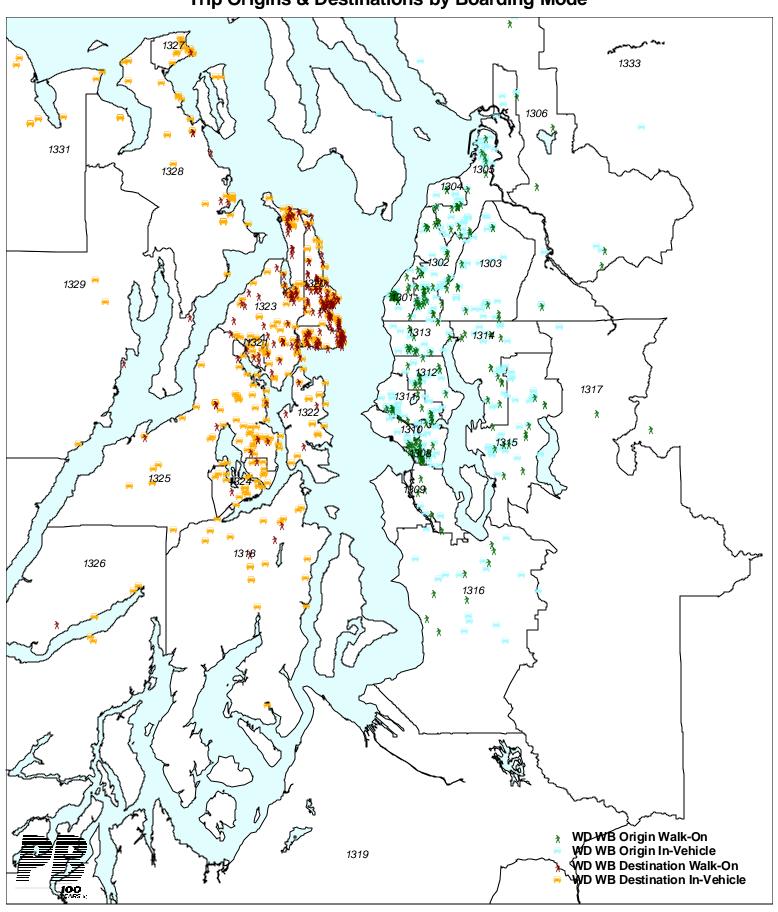


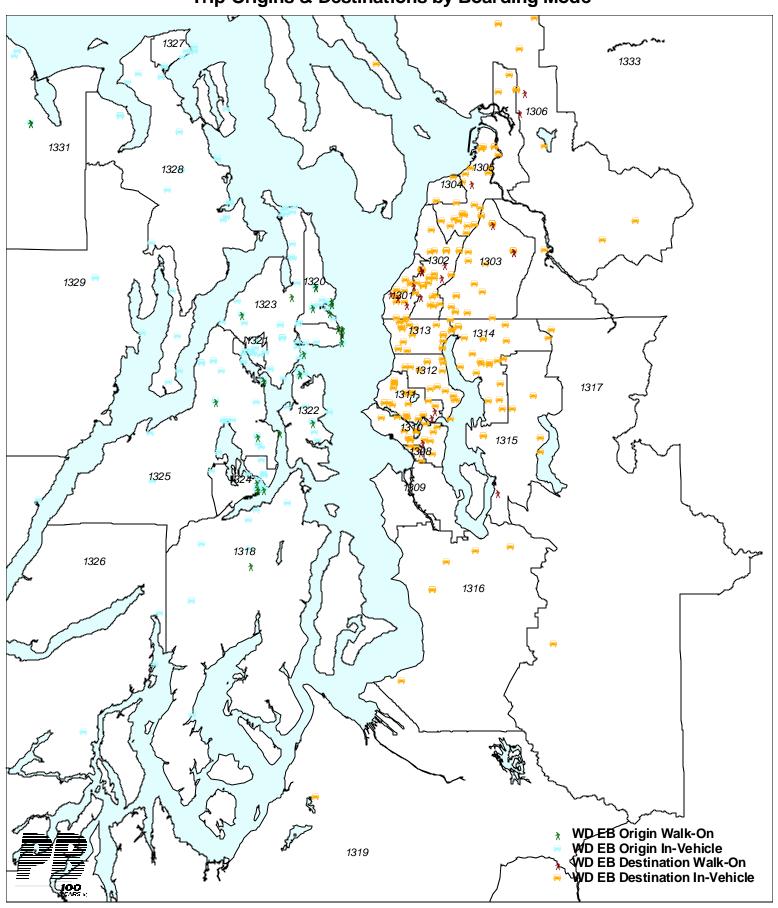
Table 13-18
Edmonds-Kingston O-D Trip Table
Weekday PM Peak Period — Eastbound — Walk-On Boardings

ORIGIN	DESTINATION	Edmonds	ромимоо 1302	SDE Mountlake Terrace	905 Greater Everett	99 Other West Snohomish County	West Whatcom/West Skagit/Island Counties	808 Seattle CBD	다. O Capitol Hill/Queen Anne/Magnolia	당 나 Ballard-Green Lake/University District	ದ ರ Greater Bellevue/Redmond/Issaquah	EE EE All Other Places	Origin Totals	Origin Shares
South Kitsap/West Pierce Counties	1318							5					5	3.3%
·								5						
Kingston	1320	19	5	5		5				9			42	30.0%
Bainbridge Island	1322	9				5							14	10.0%
Other North Kitsap County	1323	9		9					5		5		28	20.0%
Greater Bremerton	1324	5			5	5	5						19	13.3%
Other Central Kitsap County	1325	14	5									5	23	16.7%
Sequim/Other East Clallam County	1331	9											9	6.7%
Destination Totals		65	9	14	5	14	5	5	5	9	5	5	139	100.0%
Destination Shares		46.7%	6.7%	10.0%	3.3%	10.0%	3.3%	3.3%	3.3%	6.7%	3.3%	3.3%	100.0%	

Table 13-19
Edmonds-Kingston O-D Trip Table
Weekday PM Peak Period — Eastbound — In-Vehicle Boardings

ORIGIN	DESTINATION	Edmonds	роомиий 1302	SD Mountlake Terrace	Mukilteo/Paine Field	Greater Everett	95 Other West Snohomish County	1307. West Whatcom/West Skagil/Island Counties	Seattle CBD	05 Greater South Seattle	E Capitol HII/Queen Anne/Magnolia	12 Ballard-Green Lake/University District	1312 North Seattle/Sand Point	1313 Shoreline-Lake Forest Park	Bothell-Kirkland	Greater Bellevue/Redmond/Issaquah	91 Southwest King County	Other West King County	당 G Central Pierce/Thurston Counties	EE EE All Other Places	Origin Totals	Origin Shares
South Kitsap/West Pierce Counties	1318	11	12					4						4							30	2.8%
Kingston	1320	4	4	4				5	4	5		4	4	7						4	43	4.0%
Poulsbo	1321	4	16	4			7					4		4	4						41	3.8%
Bainbridge Island	1322	9	11			4		4				14	7	7	12						67	6.2%
Other North Kitsap County	1323	9	7	33	4	7			14		16	7	11	28	4	7	5	5	4	14	175	16.3%
Greater Bremerton	1324	7	14	14		94	36	17			4		4	11	7					4	213	19.8%
Other Central Kitsap County	1325	35	12	12		32		4					7	7	19	5					134	12.5%
Mason County	1326	5	7			5									12						30	2.8%
Port Townsend	1327	4				4					4	4					4				18	1.7%
Other Northeast Jefferson County	1328		14	4	4	4					28	18	7		7	4	12	4		4	109	10.1%
Southeast Jefferson County	1329		5	4	4	4		4				7	5	4	4						39	3.6%
Port Angeles	1330	7	11			4		9			4	5	4		4					7	53	5.0%
Sequim/Other East Clallam County	1331			5	4	7	9				4	4	7	16	11	7	10			9	92	8.5%
West Olympic Pensinsula	1332	4		4			4				5	5			4					4	28	2.6%
All Other Places	1333										4										4	0.3%
Destination Totals		97	114	83	14	163	56	46	17	5	67	71	56	87	87	23	31	9	4	45	1,075	100.0%
Destination Shares		9.1%	10.6%	7.7%	1.3%	15.2%	5.2%	4.2%	1.6%	0.5%	6.2%	6.6%	5.2%	8.1%	8.1%	2.1%	2.9%	0.8%	0.3%	4.2%	100.0%	$\overline{}$

Figure 13-4
Edmonds - Kingston Eastbound PM Peak Period
Trip Origins & Destinations by Boarding Mode



#### 13.2.2 Sunday Survey Period Trip Patterns

Table 13-20 summarizes the Sunday survey period for the westbound direction for all boarding modes and Figure 13-5 provides an illustration of the data. During the weekday a high percentage of passengers began their trip in the greater Everett area (likely due to USS Abraham work), in contrast a large percentage of respondents originated from various places around the region during the Sunday survey period. In both the weekday and Sunday survey period, many westbound respondents were destined to the general vicinity of the North Kitsap County district. In the eastbound direction, Table 13-21 and Figure 13-6 summarizes and illustrates the origin and destination information for the Sunday survey period. From the data it becomes evident that many respondents originated from the North Kitsap County area were headed to the Shoreline/Lake Forest Park district. The data for the Sunday survey period in the eastbound direction contrasts with that of the eastbound weekday data where many passengers originated from the greater Bremerton area (largely naval personnel commuting between Bremerton and the Everett Naval Station) and were destined to Everett and Edmonds.

Figure 13-7 and Figure 13-8 illustrates trip origins and destinations (for the Sunday survey period) by boarding modes for the westbound and eastbound directions, respectively. Interestingly, westbound walk-on passengers' origin locations are relatively evenly dispersed between downtown Seattle and downtown Everett, with clustering in Lynnwood and Edmonds. Destination locations on the west side of the Sound are highly localized in Kingston and the surrounding area. Westbound vehicle origins are relatively dispersed, but with the majority in northwest King County and southwest Snohomish County. Destinations are also quite dispersed, ranging from Bremerton to Port Townsend and the Olympic Peninsula, with the majority in north and central Kitsap County. In the eastbound direction, both walk-on and in-vehicle passengers display the same pattern as westbound passengers, with a slightly larger range in locations.

Table 13-20 Edmonds-Kingston O-D Trip Table Sunday Survey Period — Westbound — All Boarding Modes

ORIGIN	DESTINATION	9152 South Kitsap/West Pierce Counties	Kingston	oqsinod 1321	1322 Bainbridge Island	SSS Other North Kitsap County	T324 Greater Bremerton	SS Other Central Kitsap County	Mason County	1327 Port Townsend	25. Wortheast Jefferson County	Southeast Jefferson County	1330 Port Angeles	1331 Sequim/Other East Clallam County	T333 West Olympic Pensinsula	1333 All Other Places	Origin Shares
Edmonds	1301		0.6%		0.6%	1.6%	0.6%	0.6%		0.3%	0.9%	0.6%		0.6%			6.6%
Lynnwood	1302	0.3%	0.6%			2.8%	0.3%	0.6%	1.3%		0.6%	0.6%		0.9%	0.3%		8.4%
Mountlake Terrace	1303		0.9%		0.3%	0.6%	0.6%	2.5%			0.3%						5.3%
Greater Everett	1305					0.6%	0.3%	1.6%			0.3%			0.6%			3.4%
Other West Snohomish County	1306	0.3%	0.3%		0.3%	0.9%	0.3%	3.8%			1.3%		0.6%	0.6%			8.4%
West Whatcom/West Skagit/Island Counties	1307	0.3%		0.3%	1.9%	0.9%	1.6%	4.4%			0.6%			1.3%	0.3%		11.6%
Seattle CBD	1308		0.6%			0.6%	0.3%			0.6%	0.9%			0.6%	0.6%		4.4%
Greater South Seattle	1309													0.3%			0.3%
Capitol Hill/Queen Anne/Magnolia	1310		0.3%	0.6%		0.9%		0.3%						0.9%	0.6%		3.8%
Ballard-Green Lake/University District	1311		2.2%	0.3%		1.9%				0.6%	2.2%	0.3%		0.3%	0.3%		8.1%
North Seattle/Sand Point	1312		0.3%		0.6%	0.6%					0.9%		0.3%	0.6%	0.9%		4.4%
Shoreline-Lake Forest Park	1313		0.3%		0.9%	2.2%		0.6%		0.6%	0.9%		0.3%	0.9%	0.6%	0.3%	7.8%
Bothell-Kirkland	1314				0.3%	1.3%		0.3%			0.3%		0.3%	1.9%	0.6%		5.0%
Greater Bellevue/Redmond/Issaquah	1315		0.6%			0.9%				0.3%	1.3%	0.3%	0.3%	0.9%	0.3%		5.0%
Southwest King County	1316		0.3%			0.3%					0.3%		0.3%	0.6%			1.9%
Other West King County	1317									0.9%	0.6%				0.3%		1.9%
All Other Places	1333	0.6%	0.9%	0.3%	1.6%	1.9%	0.6%	1.6%	0.3%	0.9%	1.9%	0.3%	0.3%	1.9%	0.6%		13.8%
Destination Shares		1.6%	8.1%	1.6%	6.6%	18.1%	4.7%	16.3%	1.6%	4.4%	13.4%	2.2%	2.5%	13.1%	5.6%	0.3%	100.0%

Figure 13-5
Edmonds - Kingston Westbound Sunday Survey Period Trips
All Boarding Modes

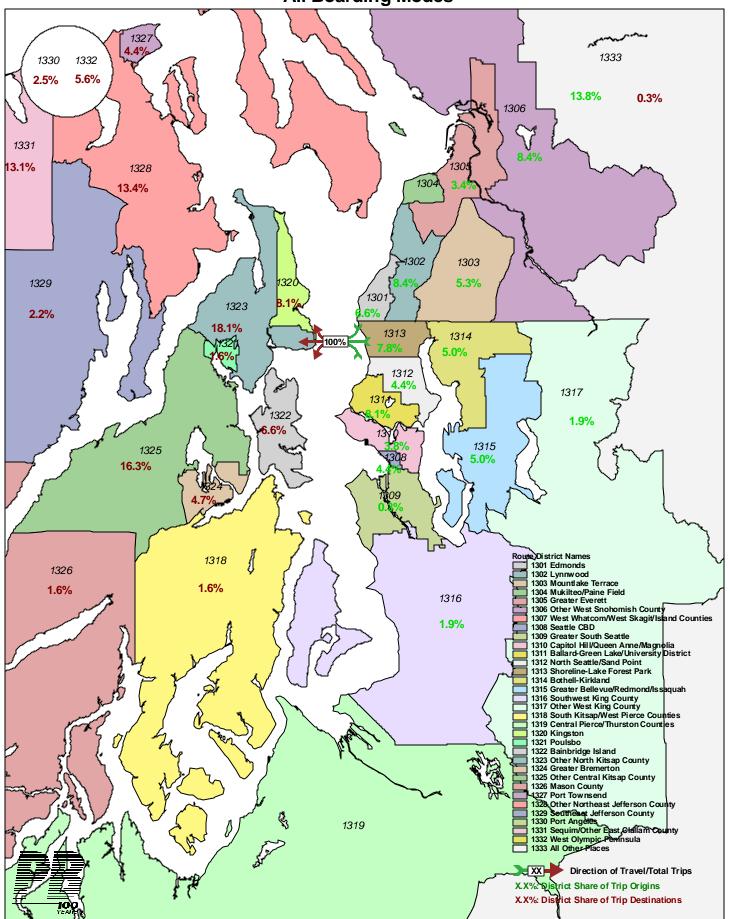


Table 13-21 Edmonds-Kingston O-D Trip Table Sunday Survey Period — Eastbound — All Boarding Modes

		,		,										0					
ORIGIN	DESTINATION	Edmonds 1301	Downwood 1302	S0S Mountlake Terrace	Greater Everett	99 Other West Snohomish County	200. West Whatcom/West Skagif/sland Counties	808 Seattle CBD	60 Greater South Seattle	55 Capitol Hill/Queen Anne/Magnolia	52 Ballard-Green Lake/University District	7157 North Seattle/Sand Point	당 당 Shoreline-Lake Forest Park	P181 Pothell-Kirkland	다. Greater Bellevue/Redmond/Issaquah	55 Southwest King County	1317 Other West King County	泛 CES All Other Places	Origin Shares
South Kitsap/West Pierce Counties	1318	0.5%				0.3%	0.3%			0.5%			0.5%	0.3%			0.3%	0.8%	3.3%
Kingston	1320	2.3%	0.8%	0.3%			0.5%				0.3%	0.8%	2.0%		0.5%		0.3%		7.6%
Poulsbo	1321						0.3%				0.3%						0.3%		0.8%
Bainbridge Island	1322		0.3%	0.3%			0.5%						1.3%	0.3%		0.3%	0.3%	0.3%	3.3%
Other North Kitsap County	1323	1.8%	2.0%	1.0%	2.0%	1.0%	1.0%	0.3%	0.3%	1.3%	0.5%	1.0%	1.3%	2.0%	1.8%	0.3%	0.3%	1.5%	19.1%
Greater Bremerton	1324	0.3%	0.5%			0.3%	0.3%				0.3%			0.3%				1.0%	2.8%
Other Central Kitsap County	1325	0.5%	0.8%	2.5%	1.3%	0.8%	1.0%	0.5%		0.3%			1.0%	0.5%				0.3%	9.3%
Mason County	1326	0.3%	1.3%	0.5%								0.3%	0.3%		0.3%			0.5%	3.3%
Port Townsend	1327	0.5%		0.5%		0.5%		0.5%	0.3%	0.3%	0.5%	0.3%				0.3%	1.0%	0.8%	5.3%
Other Northeast Jefferson County	1328	1.0%		1.3%		1.0%	0.3%	0.3%	0.5%	1.3%	3.0%	0.5%	1.0%	0.8%	1.5%	1.3%	0.3%	0.3%	14.1%
Southeast Jefferson County	1329	1.0%						0.3%				0.5%	0.8%	0.3%	0.3%				3.0%
Port Angeles	1330	0.3%	0.3%		0.5%			0.3%		0.5%	0.3%	0.3%		0.8%	0.5%				3.5%
Sequim/Other East Clallam County	1331	1.0%	0.5%	2.3%	1.5%	1.3%	0.8%			0.5%	1.8%	2.5%	0.5%	1.8%	2.3%	0.3%	0.5%	0.8%	18.1%
West Olympic Pensinsula	1332			1.3%							0.8%	0.8%	1.3%	0.5%	0.3%		0.3%		5.0%
All Other Places	1333		0.5%		0.3%	0.3%							0.3%					0.3%	1.5%
Destination Shares		9.3%	6.8%	9.8%	5.5%	5.3%	4.8%	2.0%	1.0%	4.5%	7.6%	6.8%	10.1%	7.3%	7.3%	2.3%	3.3%	6.3%	100.0%

Figure 13-6
Edmonds - Kingston Eastbound Sunday Survey Period Trips
All Boarding Modes

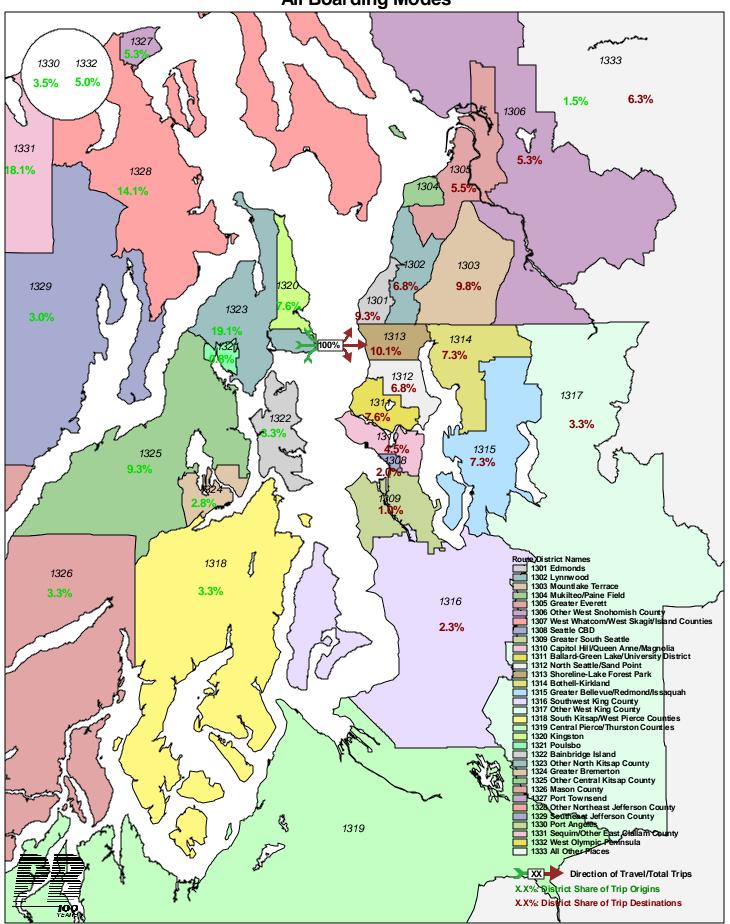


Figure 13-7
Edmonds - Kingston Westbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

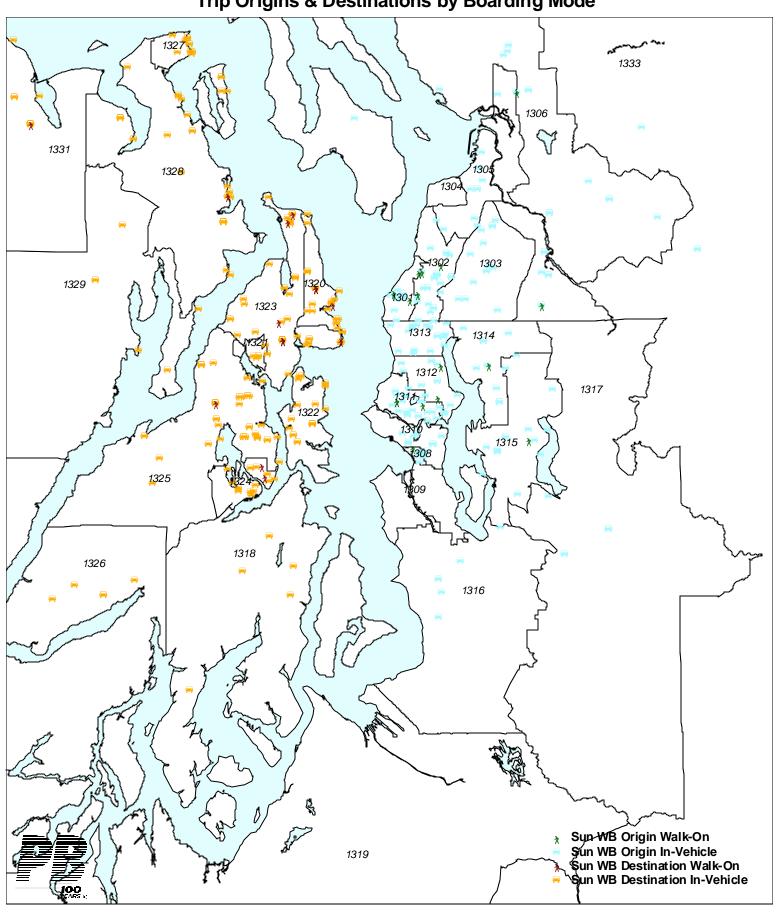


Figure 13-8
Edmonds - Kingston Eastbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

